

Hip fracture: management

Clinical guideline

Published: 22 June 2011

Last updated: 6 January 2023

www.nice.org.uk/guidance/cg124

Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the [Yellow Card Scheme](#).

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should [assess and reduce the environmental impact of implementing NICE recommendations](#) wherever possible.

Contents

Overview	4
Who is it for?	4
Recommendations.....	5
1.1 Imaging options in occult hip fracture.....	5
1.2 Timing of surgery	5
1.3 Analgesia	6
1.4 Anaesthesia	7
1.5 Planning the theatre team	7
1.6 Surgical procedures	8
1.7 Mobilisation strategies	9
1.8 Multidisciplinary management	10
1.9 Patient and carer information.....	11
Recommendations for research	13
1 Imaging options in occult hip fracture	13
2 Anaesthesia	14
3 Undisplaced intracapsular hip fractures.....	14
4 Intensive rehabilitation therapies after hip fracture	15
5 Early supported discharge in care home patients	15
6 Long-term effectiveness of total hip replacement	16
7 Femoral component design.....	17
Rationale and impact.....	18
Total hip replacement versus hemiarthroplasty	18
Femoral component design used for hemiarthroplasties.....	20
Context.....	22
Finding more information and committee details.....	24
Update information	25

This guideline is the basis of QS16.

Overview

This guideline covers managing hip fracture in adults. It aims to improve care from the time people aged 18 and over are admitted to hospital through to when they return to the community. Recommendations emphasise the importance of early surgery and coordinating care through a multidisciplinary Hip Fracture Programme to help people recover faster and regain their mobility.

NICE has also produced a [guideline on osteoporosis: assessing the risk of fragility fracture](#).

Who is it for?

- Healthcare professionals
- Commissioners and providers
- Adults with hip fracture and their families and carers.

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in [NICE's information on making decisions about your care](#).

[Making decisions using NICE guidelines](#) explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

Some aspects of hip fracture management are already covered by NICE guidance and are therefore outside the scope of this guideline. To ensure comprehensive management and continuity, the following NICE guidance should be referred to when developing a complete programme of care for each patient:

- [NICE technology appraisal guidance on preventing osteoporotic fragility fractures in postmenopausal women](#) (alendronate, denosumab, etidronate, risedronate, raloxifene, strontium ranelate and teriparatide).
- [NICE guidelines on falls in older people, pressure ulcers, nutrition support for adults, dementia, surgical site infections, venous thromboembolism in over 16s, delirium and osteoporosis: assessing the risk of fragility fracture](#).

1.1 Imaging options in occult hip fracture

- 1.1.1 Offer MRI if hip fracture is suspected despite negative X-rays of the hip of an adequate standard. If MRI is not available within 24 hours or is contraindicated, consider CT. **[2011, amended 2014]**

1.2 Timing of surgery

- 1.2.1 Perform surgery on the day of, or the day after, admission. **[2011]**

1.2.2 Identify and treat correctable comorbidities immediately so that surgery is not delayed by:

- anaemia
- anticoagulation
- volume depletion
- electrolyte imbalance
- uncontrolled diabetes
- uncontrolled heart failure
- correctable cardiac arrhythmia or ischaemia
- acute chest infection
- exacerbation of chronic chest conditions. **[2011]**

1.3 Analgesia

1.3.1 Assess the person's pain:

- immediately upon presentation at hospital **and**
- within 30 minutes of administering initial analgesia **and**
- hourly until settled on the ward **and**
- regularly as part of routine nursing observations throughout admission. **[2011]**

1.3.2 Offer immediate analgesia to people presenting at hospital with suspected hip fracture, including people with cognitive impairment. **[2011]**

1.3.3 Ensure analgesia is sufficient to allow movements necessary for investigations (as indicated by the ability to tolerate passive external rotation of the leg), and for nursing care and rehabilitation. **[2011]**

- 1.3.4 Offer paracetamol every 6 hours preoperatively unless contraindicated. **[2011]**
- 1.3.5 Offer additional opioids if paracetamol alone does not provide sufficient preoperative pain relief. **[2011]**
- 1.3.6 Consider adding nerve blocks if paracetamol and opioids do not provide sufficient preoperative pain relief, or to limit opioid dosage. Nerve blocks should be administered by trained personnel. Do not use nerve blocks as a substitute for early surgery. **[2011]**
- 1.3.7 Offer paracetamol every 6 hours postoperatively unless contraindicated. **[2011]**
- 1.3.8 Offer additional opioids if paracetamol alone does not provide sufficient postoperative pain relief. **[2011]**
- 1.3.9 Non-steroidal anti-inflammatory drugs (NSAIDs) are not recommended. **[2011]**

1.4 Anaesthesia

- 1.4.1 Offer people a choice of spinal or general anaesthesia after discussing the risks and benefits. **[2011]**
- 1.4.2 Consider intraoperative nerve blocks for all people undergoing surgery. **[2011]**

1.5 Planning the theatre team

- 1.5.1 Schedule hip fracture surgery on a planned trauma list. **[2011]**
- 1.5.2 Consultants or senior staff should supervise trainee and junior members of the anaesthesia, surgical and theatre teams when they carry out hip fracture procedures. **[2011]**

1.6 Surgical procedures

- 1.6.1 Operate on people with the aim to allow them to fully weight bear (without restriction) in the immediate postoperative period. **[2011]**
- 1.6.2 Offer replacement arthroplasty (total hip replacement or hemiarthroplasty) to people with a displaced intracapsular hip fracture. **[2017]**
- 1.6.3 Consider total hip replacement rather than hemiarthroplasty for people with a displaced intracapsular hip fracture who:
- were able to walk independently out of doors with no more than the use of a stick **and**
 - do not have a condition or comorbidity that makes the procedure unsuitable for them **and**
 - are expected to be able to carry out activities of daily living independently beyond 2 years. **[2023]**

For a short explanation of why the committee made the 2023 recommendation and how it might affect practice, see the [rationale and impact section on total hip replacement versus hemiarthroplasty](#).

Full details of the evidence and the committee's discussion are in [evidence review B: total hip replacement versus hemiarthroplasty](#).

- 1.6.4 Use cemented implants in people undergoing surgery with arthroplasty. **[2011]**

The [Association of Anaesthetists of Great Britain and Ireland, British Orthopaedic Association and British Geriatric Society](#) have produced a [safety guideline on reducing the risk from cemented hemiarthroplasty for hip fracture](#). The guideline is not NICE accredited.

- 1.6.5 Hospitals should aim to use a single type of cemented femoral component for hemiarthroplasties as standard treatment for displaced intracapsular hip fracture management. **[2023]**

- 1.6.6 If equivalent cemented femoral component designs are available, organisations should take into account overall costs, including training needs, and how familiar the team is with the component. **[2023]**
- 1.6.7 Record long-term data on hemiarthroplasties, including patient-reported outcomes and adverse events, for submission to a national registry. **[2023]**

For a short explanation of why the committee made the 2023 recommendations and how they might affect practice, see the [rationale and impact section on femoral component design used for hemiarthroplasties](#).

Full details of the evidence and the committee's discussion are in [evidence review A: femoral component design used for hemiarthroplasties](#).

- 1.6.8 Consider an anterolateral approach in favour of a posterior approach when inserting a hemiarthroplasty. **[2011]**
- 1.6.9 Use extramedullary implants such as a sliding hip screw in preference to an intramedullary nail in people with trochanteric fractures above and including the lesser trochanter (except reverse oblique). **[2011, amended 2023]**
- 1.6.10 Use an intramedullary nail to treat people with a subtrochanteric fracture. **[2011]**

1.7 Mobilisation strategies

- 1.7.1 Offer people a physiotherapy assessment and, unless medically or surgically contraindicated, mobilisation on the day after surgery. **[2011]**
- 1.7.2 Offer people mobilisation at least once a day and ensure regular physiotherapy review. **[2011]**

1.8 Multidisciplinary management

1.8.1 From admission, offer people a formal, acute, orthogeriatric or orthopaedic ward-based Hip Fracture Programme that includes all of the following:

- orthogeriatric assessment
- rapid optimisation of fitness for surgery
- early identification of individual goals for multidisciplinary rehabilitation to recover mobility and independence, and to facilitate return to pre-fracture residence and long-term wellbeing
- continued, coordinated, orthogeriatric and multidisciplinary review
- liaison or integration with related services, particularly mental health, falls prevention, bone health, primary care and social services
- clinical and service governance responsibility for all stages of the pathway of care and rehabilitation, including those delivered in the community. **[2011]**

1.8.2 If a hip fracture complicates or precipitates a terminal illness, the multidisciplinary team should still consider the role of surgery as part of a palliative care approach that:

- minimises pain and other symptoms **and**
- establishes the person's own priorities for rehabilitation **and**
- considers the person's wishes about their end-of-life care. **[2011]**

1.8.3 Healthcare professionals should deliver care that minimises the person's risk of delirium and maximises their independence, by:

- actively looking for cognitive impairment when people first present with hip fracture
- reassessing people to identify delirium that may arise during their admission
- offering individualised care in line with [NICE's guideline on delirium](#). **[2011]**

- 1.8.4 Consider early supported discharge as part of the Hip Fracture Programme, provided the Hip Fracture Programme multidisciplinary team remains involved, and the person:
- is medically stable **and**
 - has the mental ability to participate in continued rehabilitation **and**
 - is able to transfer and mobilise short distances **and**
 - has not yet achieved their full rehabilitation potential, as discussed with the person, carer and family. **[2011]**
- 1.8.5 Only consider intermediate care (continued rehabilitation in a community hospital or residential care unit) if all of the following criteria are met:
- intermediate care is included in the Hip Fracture Programme **and**
 - the Hip Fracture Programme team retains the clinical lead, including patient selection, agreement of length of stay and ongoing objectives for intermediate care **and**
 - the Hip Fracture Programme team retains the managerial lead, ensuring that intermediate care is not resourced as a substitute for an effective acute hospital programme. **[2011]**
- 1.8.6 People admitted from care or nursing homes should not be excluded from rehabilitation programmes in the community or hospital, or as part of an early supported discharge programme. **[2011]**

1.9 Patient and carer information

- 1.9.1 Offer patients (or, as appropriate, their carer and/or family) verbal and printed information about treatment and care including:
- diagnosis
 - choice of anaesthesia

- choice of analgesia and other medications
- surgical procedures
- possible complications
- postoperative care
- rehabilitation programme
- long-term outcomes
- healthcare professionals involved. **[2011]**

Recommendations for research

The 2011, 2017 and 2023 guideline committees have made the following recommendations for research.

The 2011 committee's full set of recommendations for research are detailed in the [full guideline](#).

As part of the 2017 update, the standing committee removed the recommendation for research on displaced intracapsular hip fractures and made an additional [recommendation for research on undisplaced intracapsular hip fractures](#). Full details are available in [section 3.5 of the full guideline addendum](#).

1 Imaging options in occult hip fracture

In people with a continuing suspicion of a hip fracture but whose radiographs are normal, what is the clinical and cost effectiveness of CT compared with MRI, in confirming or excluding the fracture?

Why this is important

The Guideline Development Group's consensus decision to recommend CT over a radionuclide bone scan as an alternative to MRI to detect occult hip fractures reflects current NHS practice but assumes that advances in technology have made the reliability of CT comparable with that of MRI. If modern CT can be shown to have similar reliability and accuracy to MRI, then this has considerable implications because of its widespread availability out of hours and lower cost. It is therefore a high priority to confirm or refute this assumption by direct randomised comparison. The study design would need to retain MRI as the 'gold standard' for cases of uncertainty and to standardise the criteria, expertise and procedures for radiological assessment. Numbers required would depend on the degree of sensitivity and specificity (the key outcome criteria) set as target requirement for comparability, but need not necessarily be very large. **[2011]**

2 Anaesthesia

What is the clinical and cost effectiveness of regional versus general anaesthesia on postoperative morbidity in people with hip fracture?

Why this is important

No recent randomised controlled trials were identified that fully address this question. The evidence is old and does not reflect current practice. In addition, in most of the studies the patients are sedated before regional anaesthesia is administered, and this is not taken into account when analysing the results. The study design for the proposed research would be best addressed by a randomised controlled trial. This would ideally be a multicentre trial including 3,000 participants in each arm. This is achievable given that there are about 70,000 to 75,000 hip fractures a year in the UK. The study should have 3 arms that look at spinal anaesthesia versus spinal anaesthesia plus sedation versus general anaesthesia; this would separate those with regional anaesthesia from those with regional anaesthesia plus sedation. The study would also need to control for surgery, especially type of fracture, prosthesis and grade of surgeon.

A qualitative research component would also be helpful to study patient preference for type of anaesthesia. [2011]

3 Undisplaced intracapsular hip fractures

For people with undisplaced (or non-displaced) intracapsular hip fracture, what features should be used to characterise the injury and what are the optimal clinical and cost-effective management strategies?

Why this is important

Between 5% and 15% of people with an intracapsular hip fracture will have an undisplaced fracture. There is variation in the UK in how undisplaced intracapsular hip fractures are recognised, resulting in some people not being offered the most appropriate treatment. Research is needed to help healthcare professionals understand the clinical characteristics of people who have undisplaced hip fracture (on anterior-posterior and lateral X-rays) and how this relates to the effectiveness of different treatment strategies.

The committee also noted a paucity of evidence for 2 of the interventions (total hip replacement and hemiarthroplasty) that could potentially be useful for people with undisplaced intracapsular hip fracture. A randomised controlled trial comparing these interventions would be beneficial. [2017]

4 Intensive rehabilitation therapies after hip fracture

What is the clinical and cost effectiveness of additional intensive physiotherapy and/or occupational therapy (for example, progressive resistance training) after hip fracture?

Why this is important

The rapid restoration of physical and self-care functions is critical to recovery from hip fracture, particularly where the goal is to return the person to preoperative levels of function and residence. Approaches that are worthy of future development and investigation include progressive resistance training, progressive balance and gait training, supported treadmill gait re-training, dual task training and activities of daily living training. The optimal time point at which these interventions should be started requires clarification.

The ideal study design is a randomised controlled trial. Initial studies may have to focus on proof of concept and be mindful of costs. A phase 3 randomised controlled trial is required to determine clinical effectiveness and cost effectiveness. The ideal sample size will be around 400 to 500 patients, and the primary outcome should be physical function and health-related quality of life. Outcomes should also include falls. A formal sample size calculation will need to be undertaken. Outcomes should be followed over a minimum of 1 year, and compare if possible, either the recovery curve for restoration of function or time to attainment of functional goals. [2011]

5 Early supported discharge in care home patients

What is the clinical and cost effectiveness of early supported discharge on mortality, quality of life and functional status in people with hip fracture who are admitted from a care home?

Why this is important

Residents of care and nursing homes account for about 30% of all people with hip fracture admitted to hospital. Two-thirds of these come from care homes and the remainder from nursing homes. These people are frailer, more functionally dependent and have a higher prevalence of cognitive impairment than people admitted from their own homes. One-third of those admitted from a care home are discharged to a nursing home and one-fifth are readmitted to hospital within 3 months. There are no clinical trials to define the optimal rehabilitation pathway following hip fracture for these people and therefore represent a discrete cohort where the existing meta-analyses do not apply. As a consequence, many people are denied structured rehabilitation and are discharged back to their care home or nursing home with very little or no rehabilitation input.

Given the patient frailty and comorbidities, rehabilitation may have no effect on clinical outcomes for this group. However, the fact that they already live in a home where they are supported by trained care staff clearly provides an opportunity for a systematic approach to rehabilitation. Early multidisciplinary rehabilitation based in care homes or nursing homes would take advantage of the day-to-day care arrangements already in place and provide additional NHS support to deliver naturalistic rehabilitation, where problems are tackled in the person's residential setting.

Early supported multidisciplinary rehabilitation could reduce hospital stay, improve early return to function, and affect both readmission rates and the level of NHS-funded nursing care required.

The research would follow a 2-stage design: (1) an initial feasibility study to refine the selection criteria and process for reliable identification and characterisation of those considered most likely to benefit, together with the intervention package and measures for collaboration between the Hip Fracture Programme team, care-home staff and other community-based professionals and (2) a cluster randomised controlled comparison (for example, with 2 or more intervention units and matched control units) set against agreed outcome criteria. The latter should include those specified above, together with measures of the impact on care-home staff activity and cost, as well as qualitative data from patients on relevant quality-of-life variables. [2011]

6 Long-term effectiveness of total hip replacement

What is the long-term clinical and cost effectiveness for adults (including different

subgroups) undergoing total hip replacement compared with hemiarthroplasty for displaced intracapsular hip fracture? **[2023]**

For a short explanation of why the committee made this recommendation for research, see the [rationale section on total hip replacement versus hemiarthroplasty](#).

Full details of the evidence and the committee's discussion are in [evidence review B: total hip replacement versus hemiarthroplasty](#).

7 Femoral component design

In adults undergoing hemiarthroplasty for displaced intracapsular hip fracture (including in different subgroups), which femoral component design has the best long-term outcomes? **[2023]**

For a short explanation of why the committee made this recommendation for research, see the [rationale section on femoral component design used for hemiarthroplasties](#).

Full details of the evidence and the committee's discussion are in [evidence review A: femoral component design used for hemiarthroplasties](#).

Rationale and impact

These sections briefly explain why the committee made the recommendations and how they might affect practice.

Total hip replacement versus hemiarthroplasty

Recommendation 1.6.3

Why the committee made the recommendation

The committee discussed the clinical evidence on total hip arthroplasty versus hemiarthroplasty. They agreed that although some studies showed greater benefits for total hip arthroplasty, this was not clinically or statistically significant for most outcomes. However, a combination of the clinical evidence and the health economic model developed as part of the guideline indicated that total hip arthroplasty may have some benefits and be more cost effective than hemiarthroplasty beyond 2 years. The committee noted that although recommendation 1.6.2 states that clinicians should offer arthroplasty (either total hip arthroplasty or hemiarthroplasty) to people with a displaced intracapsular hip fracture, hemiarthroplasty tends to be used more often than total hip arthroplasty. The evidence was not strong enough for them to recommend total hip arthroplasty for everyone with a displaced intracapsular fracture.

Based on their clinical knowledge and experience, the committee discussed how the long-term outcomes considered in the health economic model were important but may not be relevant to some people. For example, older people may not live long enough to experience the long-term benefits of total hip arthroplasty, and people who are not very mobile may be less concerned about the potential consequences of having a hemiarthroplasty, such as wear on the acetabulum. The committee agreed that hemiarthroplasty was a less complicated procedure than total hip arthroplasty and could result in lower dislocation rates and less blood loss.

The health economic evidence on the long-term cost effectiveness and potential clinical benefits of total hip arthroplasty led the committee to recommend that clinicians should consider the procedure for those who are most likely to benefit from it beyond 2 years. The list of criteria in the recommendation represents the past (a person's level of

independence before the fracture), present (how they currently present in hospital and if they are fit for the procedure on that day) and future (how much they are likely to benefit beyond 2 years). Including this list gives clinicians more discretion over who to offer total hip arthroplasty to and prevents the procedure being offered to some people who may get the same, or more, benefit from hemiarthroplasty.

The committee discussed how some people with significant cognitive impairments may be at increased risk of dislocations and could be less likely to benefit from total hip arthroplasty. However, they agreed that the evidence for this was too limited to make a specific recommendation for this population. The risk of dislocation can also vary depending on the severity and type of cognitive impairment, or how much support the person has. They agreed that cognitive impairment is one of many important comorbidities that should be considered when making treatment decisions. It is more important for clinicians to think about comorbidities in the context of functionality rather than whether or not a person has them. The committee also agreed that decisions about whether someone is likely to benefit most from total hip arthroplasty or hemiarthroplasty would normally be made as part of a multidisciplinary team.

The committee discussed the potential long-term benefit of total hip arthroplasty in specific groups of people, in particular younger age groups with fewer or less severe comorbidities. As the evidence did not provide much long-term data, and results were not reported for different age categories, it was agreed that further research should be carried out to inform future recommendations. A [recommendation for research on long-term effectiveness of total hip replacement](#) was therefore included to highlight the importance of comparing the effectiveness of total hip arthroplasty with hemiarthroplasty in the long term and determining the effect of each type of arthroplasty on different population subgroups.

How the recommendation might affect practice

The recommendation allows clinicians to use their discretion in deciding who is offered total hip arthroplasty. It should prevent people with mild forms of cognitive impairment being excluded from total hip arthroplasty unnecessarily. As more data becomes available on the long-term benefits of total hip arthroplasty in specific subgroups, there may be an increase in the number of people who are considered for total hip arthroplasty.

[Return to recommendation](#)

Femoral component design used for hemiarthroplasties

Recommendations 1.6.5 to 1.6.7

Why the committee made the recommendations

The committee discussed the evidence on people who had been given Thompson, Exeter/Unitrax or Exeter Trauma Stem (ETS) components and agreed that health-related quality of life, mobility, mortality, unplanned return to theatre and adverse-event outcomes were similar across all groups. The committee noted that although there were no cost-effectiveness studies, there was a large amount of variability in femoral component costs across the country for a given type of femoral component and between different types of femoral component.

The Thompson component was cheaper than the ETS or Exeter/Unitrax component, but the committee were aware of future regulatory changes requiring data about implants, meaning that some older designs are unlikely to be used in the future. Without further evidence on other cemented components currently in use, they were unable to recommend one femoral component over another.

To choose the most cost-effective option, the committee agreed it was important for hospitals to consider not only the cost of the component itself, but also the cost of training needs when switching to a new component, alongside any future costs relating to adverse outcomes. There may also be other considerations, in addition to costs. For example, some hospitals may choose to use a femoral component that is suitable for both hemiarthroplasty and total hip arthroplasty to allow consistency and greater efficiency in practice. The committee thought it was important from a training and development perspective that medical teams become familiar with implanting 1 single type of component as standard. They agreed that more research was needed on the effectiveness of different components.

The committee agreed that although the observational evidence was for femoral components not used in the UK, it did emphasise the importance of registry data in exploring longer-term adverse outcomes such as periprosthetic fracture in trauma patients who had undergone hemiarthroplasty. Recording data on hemiarthroplasties for submission to a national registry, such as the National Joint Registry, will help to provide

real-world data on the long-term effectiveness and safety of different femoral components in trauma patients.

The committee commented that the 2011 recommendation to use a proven femoral component design (based on Orthopaedic Device Evaluation Panel ratings) came from evidence of people having elective surgery. They queried whether femoral component designs for elective patients who have arthritis were appropriate for trauma patients, given that arthritis often puts people at greater risk of fractures. Therefore, the committee drafted a [recommendation for research on femoral component design](#) that would allow data for this fragility fracture population to be captured. Registry data could also be used to evaluate long-term effectiveness in specific subpopulations such as people from different ethnic backgrounds and other groups for which there is currently no evidence.

How the recommendations might affect practice

By recommending 1 femoral component as standard for hemiarthroplasties, surgical teams will become familiar operating with this prosthesis and need less training in different components. Hospitals or trusts will also choose a component that provides the best value for money, but within the context of training requirements, team familiarity and overall costs.

The National Joint Registry already collects data on total hip arthroplasties. Collecting data on hemiarthroplasties in this, or a similar database, may require some extra administrative work. But the real-world data will be valuable in helping future decision makers choose the most clinically and cost-effective femoral component. Having further research on the effectiveness of different femoral components in people from different population groups will also help inform decisions and address health inequalities in this area.

[Return to recommendations](#)

Context

Hip fracture refers to a fracture occurring in the area between the edge of the femoral head and 5 cm below the lesser trochanter (see [figure 1 in the full guideline](#)). These fractures are generally divided into 2 main groups. Those above the insertion of the capsule of the hip joint are termed intracapsular, subcapital or femoral neck fractures. Those below the insertion are extracapsular. The extracapsular group is split further into trochanteric (inter- or pertrochanteric and reverse oblique) and subtrochanteric.

Hip fracture is a major public health issue due to an ever-increasing ageing population. About 65,000 hip fractures occur each year and the annual cost (not including the considerable cost of social care) for all UK hip fracture cases is about £1 billion. About 10% of people with a hip fracture die within 1 month and about one-third within 12 months. Most of the deaths are due to associated conditions and not to the fracture itself, reflecting the high prevalence of comorbidity. Because the occurrence of fall and fracture often signals underlying ill health, a comprehensive multidisciplinary approach is required from presentation to subsequent follow-up, including the transition from hospital to community.

This guideline covers the management of hip fracture from admission to secondary care through to final return to the community and discharge from specific follow-up. It assumes that anyone clinically suspected of having a hip fracture will normally be referred for immediate hospital assessment. It excludes (other than by cross-reference) aspects covered by parallel NICE guidance, most notably primary and secondary prevention of fragility fractures, but recognises the importance of effective linkage to these closely related elements of comprehensive care. Although hip fracture is predominantly a phenomenon of later life (the [National Hip Fracture Database](#) reports the average age of a person with hip fracture as 84 years for men and 83 for women), it may occur at any age in people with osteoporosis or osteopenia, and this guidance is applicable to adults across the age spectrum. Management of hip fracture has improved through the research and reporting of key skills, especially by collaborative teams specialising in the care of older people (using the general designation 'orthogeriatrics'). These skills are applicable in hip fracture irrespective of age, and the guidance includes recommendations that cover the needs of younger people by drawing on such skills in an organised manner.

Although not a structured service delivery evaluation, the Guideline Development Group was required to extend its remit to cover essential implications for service organisation

within the NHS where these are fundamental to hip fracture management, and this has been done.

The NICE surveillance review identified new studies that were consistent with the current recommendations. However, because of a low level of compliance (around 30% nationally) with the recommendation to offer total hip replacement to people with displaced intracapsular hip fractures, we have updated this part of the guideline. The 2017 update also covers interventions for undisplaced intracapsular hip fractures, which were not covered in the original guideline.

The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.

Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the [NICE topic page on injuries, accidents and wounds](#).

For full details of the evidence and the guideline committee's discussions, see the [full guideline, addendum and evidence reviews](#). You can also find information about [how the guideline was developed](#), including [details of the committee](#).

NICE has produced [tools and resources to help you put this guideline into practice](#). For general help and advice on putting our guidelines into practice, see [resources to help you put NICE guidance into practice](#).

Update information

January 2023: We have reviewed the evidence for the management of intracapsular hip fracture and femoral component design used for hemiarthroplasties, and updated our recommendations. These recommendations are marked **[2023]**. We also made 2 new recommendations for research.

In some cases, minor changes have been made to the wording of other recommendations to bring the language and style up to date, without changing the meaning. We also made a clarification in recommendation 1.6.9 because of changes to the AO classification. This is marked **[2011, amended 2023]** and it last had an evidence review in 2011.

Recommendations marked **[2011]**, **[2011, amended 2014]** last had an evidence review in 2011. Recommendations marked **[2017]** last had an evidence review in 2017.

May 2017: Recommendations have been updated on the surgical management of hip fracture. These are marked as **[2017]**. A link was added to recommendation 1.6.4 on cemented implants to highlight safety guidance.

Where recommendations end **[2011]** or **[2011, amended 2014]**, the evidence has not been reviewed since the original guideline.

March 2014: The introduction to the full guideline and the wording of recommendation 1.1.1 have been amended to clarify how an occult fracture is identified and when an MRI scan should be done.

ISBN: 978-1-4731-4923-6

Accreditation

